Agriopis aurantiaria (Hb.) (Lep.: Geometridae): two melanistic forms in the London area

B. Kettlewell (1973, *The Evolution of Melanism*) lists only one of the several male melanic forms, ab. *fumipennaria* Hellweger (= *fusca* Porritt), classifying it as an industrial melanic found in Yorkshire; subsequently it has been found on Mitcham Common, Surrey by Bernard Skinner. Quite different from this dark, almost unmarked form is ab. *fasciaria* Linstow, the forewings of which have in addition to the normal transverse lines a darker band between the postmedial and subterminal lines. In torchlight at night it is readily seen to be darker than normal *aurantiaria*, and I think it can be considered a melanistic form which is found particularly in certain areas which have had high levels of atmospheric pollution. Thus the series in the National Collection at the British Museum (Natural History) is largely composed of specimens from Huddersfield and Delamere, areas well known for melanic forms, and Epping and Wimbledon in the London area. There is also a record from the New Forest.

E. aurantiaria was exceedingly common on certain parts of Dartford Heath between 1960 and about 1985; it is now much scarcer. These parts were wooded, containing thickets of hawthorn, isolated oaks and saplings of sycamore. A half-hour's search at night would reveal several ab. *fasciaria* among several dozen *aurantiaria* specimens, at a frequency of about 15%. These Dartford Heath colonies were characterised by being comprised of well marked specimens, and ab. *macularia* Nordetrom (with a row of submarginal spots), ab. *nigrofasciaria* Scholz (these spots coalesced into a dark band) and ab. *ellipsaria* Lempke (postmedian line forming a small ellipse within itself near costa) were common. It is interesting to find that E. Newman (1874, *An Illustrated Natural History of British Moths*) describes *aurantiaria* as having "an oblique line of spots between the third line and hind margin" i.e. ab. *macularia*.

Mitcham Common is about fourteen miles west-south-west of Dartford Heath; the habitat for *aurantiaria* is similar in each locality. My knowledge of the Surrey colony is based on three evening visits in 1979, 1985 and 1987, essentially to look for ab. *fumipennaria*, and on the perusal of the series of the moth in Bernard Skinner's collection. On each of my expeditions to Mitcham Common I found a specimen of the extreme melanic form, but none worth collecting, from which I would estimate an incidence of no more than about 2%, although I understand from Bernard Skinner that it is more frequent and that 5% is more realistic a figure for the period in question.

The other forms mentioned above except *fasciaria*, also occur on Mitcham Common, although I was left with the impression that in this locality there was a higher proportion of pale and not well-marked specimens in contrast with the Dartford Heath colony. However, the most significant difference is

the apparent absence of *fumipennaria* from Dartford Heath, and *fasciaria* from Mitcham Common. Chalmers-Hunt (1976, The Butterflies and Moths of *Kent*) mentions none of these forms for the county, although several other forms are listed as being in the National Collection.

I wish to thank Mr D. Carter for granting me permission to study the National collection and relevant literature.- B.K. WEST, 36 Briar Road, Dartford, Kent DA5 2HN.

A late example of *Noctua pronuba* L. (Lep.: Noctuidae)

Operating the garden trap, ever hopeful of a brief spell of warm weather, on 25 November 1995, the sole occupant in the morning was a plump and pristine example of Noctua pronuba. Whether this was an example of a second brood or an immigrant remains unclear.- PAUL SOKOLOFF, 4 Steep Close, Orpington, Kent BR6 6DS.

Rare migrants during October 1995

On 8 October, with warm air arriving from north-west Africa, I set off to the Lizard, Cornwall with high hopes of migrants. It was soon evident on this first evening that a migration was in progress with Spodoptera cilium Guen. in one of the moth traps situated at Coverack, together with six Rhodometra sacraria L. The southerly breeze continued uninterrupted for the next ten days and the following migrants were recorded:-

9 October:

- 1 Agrius convolvuli L.
- 1 Mythimna vitellina Hb.
- 1 M. Loreyi Dup.
- 4 Spodoptera exigua Hb.
- 1 Eublemma parva Hb.
- 10 October:
 - 1 M. vitellina
 - 1 M. loreyi
 - 2 S. exigua
- 11 October:
 - 1 Macroglossum stellatarum Linn. 25 R. sacraria
 - 2 Mythimna albipuncta
 - 2 M. vitellina
 - 1 M. lorevi
 - 1 S. exigua
 - 2 Heliothis armigera Hb.
 - 1 Eublemma ostrina Hb.

- 39 R. sacraria 5 Hellula undalis Fabr.
 - 1 Palpita unionalis Hübn.
 - 1 Vanessa atalanta L.
- 19 R. sacraria 1 H. undalis 1 P. unionalis
- 2 Orthonama obstipata Fabr.
- 7 Lithosia quadra L.
- 3 P. unionalis
- 1 H. undalis
- 2 V. atalanta